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BECOMING A REFLECTIVE TEACHER

No matter how well you teach, there is always room for improvement. One way to continually improve is to learn from your day-to-day teaching experiences by becoming a reflective teacher. This chapter briefly describes several perspectives on why and how teachers should reflect. It identifies a range of techniques that you can use to help you reflect on the contexts within which you teach, how you teach, why you teach in a particular way, and the effects you have on those you are trying to teach.

When you have mastered the ideas in this chapter you will be able to:

- *Explain the concept of reflective teaching.*
- *Develop a summary of the principles of reflective teaching to guide your interpretation of the information provided in later chapters.*
- *Develop a personal checklist of questions to ask yourself when planning lessons and when reviewing your teaching, so that you can improve your teaching.*

What is reflective teaching?

Educational literature contains numerous references to the idea that teachers ought to be reflective. You will find that terms such as reflective teaching, reflection-on-action, reflection-in-action, critical reflection, and reflectivity are frequently used to label this concept (e.g., Brookfield, 1995; Cruickshank, 1987; Marsh, 2000; Martinez, 1990; Onosko, 1992; Ross, 1989; Schön, 1983, 1987; Smyth, 1986; Van Manen, 1991; Zeichner, 1987). These authors emphasise different aspects of reflection, but they all focus on the general idea that teachers should think carefully about what they do and why they do it.

In our everyday lives, when we use terms like *reflection* or *reflective thinking* we usually mean that we are looking back at something and thinking about what happened and why it happened. We are trying to learn from our experiences so that we can use this knowledge to guide what we do in the future. In this sense, the concept of reflection is certainly not a modern one. Throughout history, reflective thinkers have been highly regarded for their ability to analyse complex situations, to recognise subtleties in problems, to think divergently, and to offer solutions to problems that others found perplexing. Plato, Aristotle, Confucius, Galileo, Newton and Einstein are examples of such thinkers.

We can reflect about anything, but when you are learning to be a teacher it is particularly useful to reflect about yourself as a learner and as a teacher. Reflecting on learning and teaching is not a new thing—some teachers have probably always done it. However, it has been only relatively recently (in the study of learning and teaching) that the importance of reflection has been widely recognised. Most Western writing in this area seems to be based either directly or indirectly on the work of Dewey (1933) who made a distinction between "routine" action (guided by tradition, habit, authority and institutional expectations) and "reflective" action (guided by constant self-appraisal and development). These ideas have been refined by later writers such as Van Manen (1977), Zeichner (1981-82, 1983, 1987), Schön (1987), Cruickshank (1987) and Korthagen and Kessels (1999). The writings on this theme, and the teacher education programmes that have developed from these ideas, all have as their general aim "the development of teachers who have the skills and dispositions to continually inquire into their own teaching practice and into the contexts in which their teaching is embedded" (Zeichner, 1987: 565).

Although all the literature on reflective teaching emphasises the idea that teachers should think about their teaching, various writers approach the topic from quite different points of view. In fact, until relatively recently there was not strong agreement on what, beyond mere thinking about teaching, is the essence of reflective teaching. When trying to place the various views about reflection into a manageable conceptual framework, it is useful to consider the perspective provided by Gilbert (1994:512-513). She suggests that there are essentially two views of education. From one perspective, education is seen as "a servant of the economy" and competent teachers are thought of as "technicians who have developed certain specifiable skills" and who can produce "pre-determined learning outcomes in students". Gilbert refers to this as a "technicist" view of education. From the alternative perspective, education is seen "fundamentally as an agent of social change" and teachers are seen as "innovative professionals" whose competence goes well beyond simply having "a set of specific, identifiable technical skills" (Gilbert, 1994:514). Gilbert refers to this as a "liberatory" view of education, a term based on the ideas of the Brazilian educator Paulo Freire. (Education that is liberatory encourages learners to challenge and change the world, not merely uncritically adapt themselves to it.)

Different views of teaching give rise to different views about reflection. Those who take a technicist view of teaching tend to favour reflection on the technical aspects of teaching. Those who take a liberatory view of teaching tend to favour reflection on the moral, ethical, political and social factors that influence teaching. These approaches to reflection are often considered as incompatible, but they can equally well be viewed as complementary. Let's consider how that is possible.

Van Manen (1977, 1991) identified three different levels of reflection—technical, practical and critical. They are defined as follows:

> ***Technical reflection***: Teachers are concerned with the technical application of educational knowledge in the classroom to maintain order and to achieve predetermined outcomes; reflective skills are developed and used to improve the application of research-based knowledge. [This type of reflection is the central focus of the work of Cruickshank (1987).]
>
> ***Practical reflection:*** Teachers become concerned with goals, the connections between principles and practice, the assumptions that underlie their practices, and the value of their goals. [This is the basis of Schön's (1983) approach to reflection.]
>
> ***Critical reflection:*** Teachers become concerned with issues beyond the classroom, so that moral and social issues such as equity and emancipation can inform their reflections on classroom practices. [Brookfield (1995:8) goes a step further by suggesting that reflection should not be considered as *critical* unless it serves two distinctive purposes: the first being to understand the power relationships in teaching and the second being to question the assumptions and practices that "seem to make our lives easier but that actually end up working against our long term interests".]

Zeichner and Liston (1987) addressed this issue slightly differently by focusing on criteria for reflection rather than levels of reflection. They noted that when teachers use ***technical criteria*** for their reflection they concentrate on the application of previously acquired knowledge for the achievement of given objectives. When they use ***educational criteria***, teachers consider how situational and institutional contexts influence teaching and learning, and they consider the value of different educational goals. When they use ***ethical criteria***, teachers reflect upon the moral and ethical aspects of teaching and education. It should be noted that Zeichner (1990) opposes the notion that these levels/criteria should be seen as hierarchical, since this conveys the impression that technical and practical reflection will ultimately be transcended by critical reflection. As Zeichner (1990:61) rightly claims, "this devalues technical skill and the reality of teaching and should therefore be rejected".

Some of the most influential writing on reflection has been by Donald Schön (1983, 1987). He argues that technicist models of professional knowledge (based on knowledge gained from independent scientific research) are inadequate for explaining how professionals, such as teachers, develop their professional knowledge and improve their practice. Schön uses the concept of "frames" to explain how teachers perceive the situations in which they work. Basically, a frame is a view or a set of expectations (based on knowledge, values and beliefs) that a teacher uses to interpret and organise his/her environment and to guide his/her behaviour in that environment. Teachers' frames are determined by their past experiences and their previous efforts to make sense of those experiences. Some teachers are able to "frame" what happens in their classroom in multiple ways (that is, view it from different perspectives), whereas others are able to frame it in only one way and, therefore, can see only one set of possibilities for action in a given situation.

When teachers are able to deliberately change the way they are looking at a situation they are said to "reframe" it. This would happen, for example, if a teacher initially thought that students' lack of effort was due to laziness but then deliberately started to look at how her approach to teaching might be demotivating the students. "To achieve change, teachers need to discover that their existing frame for understanding what happens in their classes is only one of several possible frames" (Barnes, 1992:17). This idea that reframing a situation needs to be a deliberate "mindful" act is taken up in considerable detail by Linder and Marshall (2003) and it forms the basis of the suggestions by Shay (2003) about ways in which teachers might resolve differences of opinion about the quality of students' work.

Geddis (1996:251) suggests that the frames teachers use have two interacting components. "One component is a *descriptive conceptual scheme* that enables teachers to see classroom events in a particular way; the other component is a *script* which provides organized patterns of action arising from that way of seeing". Both the conceptual (what teachers think) and action (what teachers do) components of these frames must be the focus of reflection if teachers are to learn from their experiences.

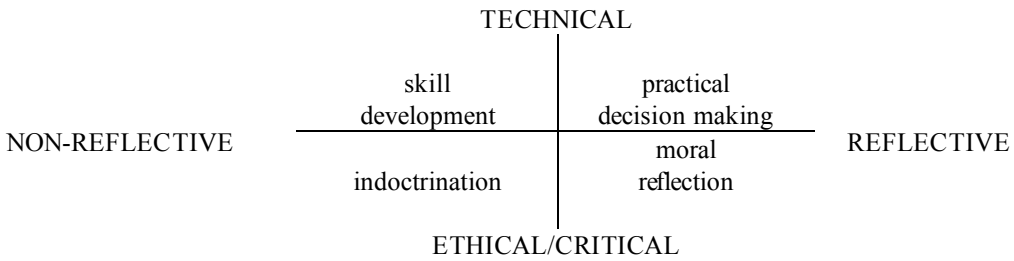
Using the notion of frames, Schön (1983, 1987) argues that professionals develop their expert knowledge through two separate, but related, processes that he describes as reflection-on-action and reflection-in-action. Both approaches to reflection involve similar activities—framing and reframing problematic situations—but they occur at different times in relation to the situations being considered.

Reflection-on-action it is the typical self-evaluative thinking that teachers engage in *after* most lessons. It is a deliberate attempt to understanding *past* events in order to shape future action. Because it occurs when the teacher is able to concentrate on reflecting (free from other distractions), the teacher can carefully choose the focus of reflection and the frames that will be used to guide that reflection. Both the frames and the process of reflection can be explicit and deliberate.

Reflection-in-action occurs "on the run"; teachers simultaneously teach and analyse what they are doing, why they are doing it and how the students are reacting. You can picture this as being like the teacher presenting a lesson and simultaneously standing at the window watching what is happening and trying to explain why it is happening—a rather tricky skill to master. In order to reflect-in-action, a teacher must be able to frame problems almost subconsciously, generate hypotheses, and immediately test them. Both the frames employed to make sense of classroom events and the process of utilising these frames are tacit (they may not be made explicit).

When reflection-in-action is continuous and automatic it becomes the distinguishing characteristic of the "spontaneous intuitive performance of the competent professional functioning in complex environments" (Geddis 1996:250). Butler (1996:273) points out that reflection-in-action is "possible only if there is mental processing capacity available to get outside the act of generation of the performance and to watch its effects and evaluate them". That is why you may find it difficult to reflect-in-action in the early part of your teaching career—your mental capacity might be taken up just thinking about how to survive and perform. As you gain experience, you can pay less attention to surviving and many of your teaching activities will become routine—then you will be better able to reflect on what is happening as it is happening.

Whether teachers are reflecting on their teaching as it happens or after it has happened, two important factors can vary: the depth of their reflection (varying from non-reflective to highly reflective) and the nature of the things they reflect upon (varying from technical to ethical issues). (Valli, 1993) represents the resulting possibilities for the types of reflection that teacher education programmes might emphasise as follows:



Teacher education programmes that focus on the technical aspects of teaching in a non-reflective way are basically emphasising skill development ("Do it this way, but don't ask why"). This was a feature of many teacher education programmes about 50 years ago. Programmes that encourage students to reflect, but on only the technical aspects of their teaching (encouraging them to ask questions such as "Why does this technique help students to learn?"), are emphasising practical decision making. Programmes that emphasise the moral, ethical and social aspects of teaching in a non-reflective manner ("It is morally wrong to do that, but don't ask why?") are labelled by Valli as indoctrination. Programmes that encourage students to reflect on the moral, ethical and social aspects of teaching (asking questions such as "Why are we imposing these values on students?") are said to be emphasising moral reflection.

Valli (193:36) suggests that the "moral reflection" quadrant of her model "is the most justifiable and holds the greatest promise as a viable image of teaching". This view is echoed by Zeichner and Gore (1995:16) when they describe a social reconstructionist approach to action research in teacher education that "brings the social and political context into focus and considers whether our work in teacher education is contributing towards the elimination of inequalities and

injustices in schooling and society".

If teaching is taken for granted it becomes mechanical and ineffective. As teachers engage in thinking about their past actions, their current situation, and their future intentions, their teaching ceases to be routine and becomes reflective. By definition, reflective teachers think critically about all their teaching practices and accept that what happens in their classrooms should be questioned and, if necessary, changed.

Whatever approach is taken to reflection, it seems that the ultimate aim of helping teachers to reflect is to produce what Schön (1983, 1987) refers to as the "reflective practitioner"—one who can think while teaching and respond appropriately to the unique situations that arise. While the approaches to achieving this aim may vary, the basic ideas are similar: if teachers adopt a reflective approach to their teaching, they not only question their own practices but also render problematic many of the aspects of teaching that are generally taken for granted. As Smyth (1984:32) suggests,

> Put simply, to act reflectively about teaching is to pursue actively the possibility that existing practices may effectively be challenged and, in the light of evidence about their efficacy, replaced by alternatives.

This reflection must be open to the possibility that existing practices are not only inappropriate but that they are being driven by inappropriate sets of beliefs and values. Indeed, as Noffke and Brennan (1988) suggest, the real choice for teachers is not so much whether or not to be reflective but, rather, what to reflect upon.

No approach to reflection is without its critics, and the most common criticism of any approach is that it denies the existence of other views. Such a criticism is sometimes made of even the critical moral reflection approach that should be the most open (see Valli, 1993). Any approach to teaching or reflection that does not acknowledge that other approaches have some merit is dangerous.

In the remainder of this chapter, a broad view of reflective teaching (represented by the right-hand half of the Valli model) is taken. This approach will emphasise that *reflection is a form of inquiry through which teachers can question their actions, the contexts in which they teach, and all the influences on those actions and contexts*. It is based on the premise that teachers have valuable knowledge about teaching and that they are capable of making that knowledge explicit. However, it is only when teachers become conscious of the theories implicit in their practices that they can reflect critically on them and make fundamental changes to their classroom practices.

Why should teachers be reflective?

The benefits of reflection are considerable and tangible. For example, Korthagen and Wubbles (1991) provide evidence that reflective teachers have better

interpersonal relationships with students than non-reflective teachers, and that they experience a higher level of job satisfaction. They also suggest that reflective teachers have strong feelings of security and self-efficacy, can talk and write readily about their experiences, and are more likely than non-reflective teachers to allow their students to learn by investigating and structuring things for themselves. You will come to appreciate the importance of this approach to teaching as you explore the teaching strategies described in Chapters 4 to 12 of this book.

The literature suggests several other reasons why teachers should be encouraged to be reflective. Some of these reasons have a sociological basis (Zeichner, 1992a), while others clearly attempt to link reflection with teacher effectiveness in a technical or behaviourist way; that is, they suggest that through reflection teachers can improve their teaching and their students' learning (Cruickshank, 1987; Troyer, 1988; Killen, 1991). Others relate teacher reflection to changes in measurable student factors such as thoughtfulness (Onosko, 1992).

Reflection is an important tool for learning to be a better teacher. It is useful to adopt Butler's (1996) view that this learning process has seven goals: (1) to review a process, such as a teaching episode, to see whether it achieved its intended outcomes, (2) to make one's learning explicit, (3) to complete the learning cycle for each incident in our lives, (4) to give a more considered response to an event, (5) to achieve meaning and understanding, (6) to add value to self and to performance, and (7) to help move us from novice to expert.

Dobbins (1996:270) highlights several reasons why teachers should be reflective and why the practicum in teacher education programmes should have a focus on reflection. Firstly, she suggests that through reflection student teachers can "maximise their learning from the practicum and accept responsibility for their own professional development" and this can empower student teachers to "think and learn for themselves". Quite clearly, a similar argument could be made for encouraging experienced teachers to be reflective. Dobbins' second reason for encouraging reflection is that "teaching and the climate within which teaching takes place are different now from what they were". Because of the changing demands and responsibilities placed on teachers they must be reflective in order to respond appropriately to their changing circumstances. Finally, Dobbins emphasises that reflection is important because "teaching, as well as being a practical and intellectual activity, is also a moral endeavour". Without the ability to reflect, teachers will find it difficult to make morally appropriate decisions about what they do and why they do it.

There is little doubt that the development of teaching skills can be hastened if beginning teachers have opportunities for guided critical reflection (Selinger, 1991; Killen, 1990). There is also evidence that experienced teachers can change their classroom practices quite readily if they are provided with structured feedback on which to reflect (Killen, 1991; Nolan & Huber, 1989; Phillips & Glickman, 1991). While some would argue that technocratic approaches to

changing teachers' classroom practices are inappropriate (Gore, 1987), there are others who suggest that technical competence may be a precondition for reflection (Hoy & Woolfolk, 1989) and there is some evidence that reflective, critical, self-analytic thought is difficult for teachers with little experience (Berliner, 1988; Hammrich, Bonozo & Berliner, 1990; Marshall, 1990). Whether the technical and critical aspects of teaching should be reflected upon concurrently or whether the critical issues are better dealt with after teachers have achieved an acceptable level of technical competence is likely to remain an issue of debate (Killen, 1989). Whatever view is taken on this point, it should be remembered that "it is worthwhile to pursue reflection in teaching only to the extent that it contributes to better teaching" (Korthagen & Wubbels, 1991:1). This is a pragmatic point of view, but it does not exclude consideration of issues of equity, morality, power and social justice. This book emphasises that reflection on the technical aspects of teaching and reflection on broader educational issues are complementary, not mutually exclusive.

Whatever the prime motive for their reflection, it is likely that reflective teachers will devote more time and effort to critical review and analysis of their teaching and their students' performance than will teachers who are not reflective (Walker, Adamsky, Brower & Hart, 1992). As a result, they are likely to have greater interest in self-improvement, have a greater interest in data on their teaching behaviour, have higher self-esteem, make greater efforts to encourage their students to be reflective and to think critically, and believe that they have more power to influence student learning significantly (Nolan & Huber, 1989). All of these outcomes are obviously worthwhile.

As you progress through your teacher education programme, you will be confronted with a bewildering array of theories of learning, teaching strategies, educational philosophies and advice from well-meaning lecturers, teachers and supervisors. Balancing these theories and experience-based advice against the realities of the classroom and your immediate concerns for survival and preservation of self-esteem can be confusing and stressful. Skills in reflection can help you to understand the situations you face when teaching and thus minimise your concerns. Finally, reflection can help you to appreciate that you, too, can be a producer of educational knowledge; through careful consideration of your learning and teaching experience you can develop insights that will help you, and others, to better understand teaching and learning.

Can reflectivity be quantified and measured?

Various attempts have been made to devise systematic ways of identifying, classifying, and quantifying reflective teaching behaviour. The systems vary because they are based on different conceptions of reflection. For example, MacKinnon (1986) proposed that reflective behaviour could be identified during supervisory conferences by looking for clues in the dialogue between the supervisor and the teacher. He suggested that a reflective teacher would show evidence of (1) reframing problem situations, (2) changing the perspective from which classroom phenomena were viewed, (3) changing the conclusions which

were reached after the problem had been reframed, and (4) drawing on personal experience as a student to make sense of their pupils' position.

Approaching the problem from a similar perspective, Pollard and Tan (1993) and Pollard (2002) identified seven key characteristics of reflective teachers that are incorporated into the following points:

- Reflective teachers have an active concern with aims and consequences, as well as means and technical efficiency.
- Reflective teachers follow a cycle of monitoring, evaluating and revising their practice continuously.
- Reflective teachers are competent at gathering evidence from their classrooms to support the development of their teaching competence.
- Reflective teachers are open-minded, responsible, dedicated, energetic and enthusiastic.
- Reflective teachers make judgements that are informed by self-reflection, by evidence-based inquiry and by insights from educational disciplines (theory).
- Reflective teachers enhance their professional learning and personal fulfilment through collaboration and dialogue with colleagues.
- Reflective teachers are able to interpret, imaginatively adapt and enhance the requirements of external agencies.

In a more structured approach to quantifying teacher reflection, Zeichner and Liston (1985) developed a reflective teaching index (RTI). The index was constructed around the idea that there can be four types of discourse between supervisors and student teachers in post-observation conferences: factual, prudential, justificatory, and critical. *Factual* discourse was concerned with what occurred during the teaching episode, or what would occur in future. *Prudential* discourse was concerned with evaluating the effectiveness of what had occurred. *Justificatory* discourse focused on the reasons that particular things had happened. *Critical* discourse referred to the values, beliefs and assumptions underlying the reasons that student teachers gave for their actions. The RTI was constructed to represent the proportion of discourse between the supervisor and student teacher that represented reflective forms of communication.

In an attempt to develop an operational definition of reflective teaching, and an instrument for measuring it, Kirby and Teddlie (1989:46) suggested that there are three dimensions of reflective practice: diagnosis, testing and personal causation. They defined diagnosis as "the ability to set or frame the problem based on professional knowledge, past experience, the uniqueness of the situation and people involved, social and professional norms of behaviour, and expectations held by others". They suggested that the reframing of the problem should be evaluated "according to its ability to be solved, the desirability of the solution, and the congruence of the solution with fundamental values and theories held by the practitioner". The final characteristic of reflective practice is a commitment by the teacher to "the personal and professional values used in setting the

problem and (an acceptance of) responsibility for actions taken". Using this framework, Kirby and Teddlie developed a fifteen-item Reflective Teaching Instrument that they claim is a valid and reliable way of examining relationships between reflective teaching and teacher effectiveness.

By studying the ways in which novice and expert teachers talked about their teaching experiences, Simmons, Sparks, Starko, Parch, Colton and Grinberg (1989) developed a Taxonomy of Reflective Pedagogical Thinking to describe ways in which teachers described, analysed and interpreted instructional events. Their taxonomy was based on the assumption that the key aspect of pedagogical thinking is "the ability to accurately describe connections between specific instructional events and appropriate educational concepts and principles in light of contextual factors" (Colton, Sparks-Langer, Tripp-Opple & Simmons, 1989:45).

One of the simplest ways to measure reflective teaching behaviour was proposed by Walker, Adamsky, Brower and Hart (1992:26). They defined a reflective teacher as "one who devotes time and effort (to) critically reviewing and analysing one's own and the class's performance, relative to each of the three phases of teaching (preaction, interaction, and postaction) described by Cruickshank et al. (1981)". They suggested that the amount of time devoted to each of these phases of teaching was a measure of a teacher's reflective teaching behaviour.

An indirect method of measuring teacher reflectivity is described by Korthagen and Wubbles (1991). They developed the "IEO Test for Internal/External Orientation" to determine the degree to which prospective teachers (of mathematics) were internally or externally oriented in the domains of "self", "fellow students", and "mathematics". They identified several generic characteristics which they claimed to be "critical attributes of reflective student teachers" (Korthagen & Wubbles, 1991:7). The attributes were: (1) The reflective student teacher is capable of structuring situations and problems, and considers it important to do so; (2) The reflective student teacher uses certain standard questions when structuring experiences; (3) The reflective student teacher has no trouble answering questions about what he or she wants to learn (about teaching); and (4) The reflective student teacher can adequately describe and analyse his or her functioning in interpersonal relationships with others.

These few examples illustrate the diversity of approaches and the difficulty in measuring reflectivity. This is not an unusual situation in education. There are many examples in the literature of important concepts in teaching that have taken decades to operationally define and measure. (See for example, Cruickshank & Kennedy, 1986, for an account of the research into teacher clarity.) The important point here is that there are various ways in which reflection can be quantified and, therefore, it is possible to chart your development as a reflective teacher.

How can you reflect on your teaching?

The literature contains many suggestions for ways in which teachers, or teacher education students, can learn to reflect on their teaching, themselves as learners, and education in general. These strategies include the use of portfolios (Richert, 1990; Cole, 1991), inquiry-oriented supervision (Melody, 1993; Ruddick & Sigsworth, 1985; Zeichner & Liston, 1987), cross-cultural teaching experiences (Vall & Tennison, 1992), metaphors (Marshall, 1990), reflectivity training (Troyer, 1988), journal writing (Walker, 1985; Korthagen, 1985; Grumet, 1989; Holly, 1989), fictional writing (Convery, 1993), action research (Hanna, 1986; Killen, 1993a; Lind, 1984; Zeichner & Gore, 1995; Zeichner & Liston, 1987), ethnographic studies (Gitlin & Teitlebaum, 1983; Salzillo & Van Fleet, 1977), collaboration (Mason, 1989; Shapiro, 1991), case studies (Hill, 1986; Hutchins, 1993), analysis of classroom discourse (Love, 1994), microteaching (Peters & Moore, 1982; Winitzky & Arends, 1991), and the Ohio State University Reflective Teaching lessons (Cruickshank, 1987).

These techniques for reflection could be grouped into what Garman (1984, 1986) refers to as processes of "reflection on action" and "reflection through recollection". (Note here the extension of Schön's idea of reflection-on-action.) In order for a teacher to reflect on action, segments of their teaching must be recorded as "stable data" so that they can be analysed and interpreted at a later time. This recording might be on audio tape or videotape, or it could be verbatim data recorded by an observer. For reflection through recollection, a teacher simply recalls significant events and records them in a journal, or other suitable format, for further consideration.

Each of the techniques listed above has supporters and critics, and there is little doubt that each technique is useful for some teachers in some circumstances. Because the various strategies that have been employed to encourage teacher reflection do not all have the same purpose, the focus of the reflection that they engender, and the potential of that reflection to change teaching practices and to give the teacher control over the context in which they teach, vary considerably. However, the techniques have one thing in common: they all encourage teachers (or student teachers) to think about themselves and about their teaching experiences. However, as Zeichner and Gore (1995:15) point out, teachers' actions will not necessarily be better "just because they are more deliberate and intentional"—a broader view of both teaching and reflection is needed.

Is it easy to become a reflective teacher?

There is considerable research evidence to suggest that inexperienced teachers may not analyse, evaluate and direct their teaching practices in the metacognitive manner that is the mark of an accomplished reflective practitioner. Some of the reasons for this are explored in Calderhead (1989), Richert (1990), Killen (1990) and Richards (1996). The following table summarises some of these reasons and indicates how you might deal with these issues. These points are not presented to discourage you! They are made explicit so that you will appreciate the challenges

facing you as you strive to become a reflective teacher and so that you can start to develop strategies for overcoming these difficulties.

Common barriers to reflection	What might you do?
Beginning teachers may be so preoccupied with the subject matter, or with their delivery of the lesson, that they have little time to consider how well it is going.	Prepare thoroughly so that you are confident of your knowledge and clear about the structure of your lesson. Use a clear lesson plan to guide you.
Beginning teachers may be reluctant to be self-critical at a time when they are lacking in self-confidence and when they are fearful of failure and their vulnerability.	Don't expect to be perfect. But do acknowledge that you need to improve.
Beginning teachers may lack the knowledge of diverse teaching strategies that might help them to perceive alternatives to their current practice.	Talk to other teachers about how they teach. Ask for advice. Observe other teachers. Look for ideas on the Internet. Be prepared to take a risk and "step outside your comfort zone".
Inexperienced teachers may have a very limited number of "frames" within which to consider their teaching.	Practise deliberately looking at situations from more than one perspective. Try to look at your teaching through the eyes of your students. Take Edward de Bono's advice and change "thinking hats".
Some beginning teachers are unable to achieve the detachment from their own practice that would enable them to reflect upon it objectively and critically.	Get feedback from your students. Ask colleagues to observe your teaching and give you feedback. Establish a "reflective partnership" (Killen, 1995).
Beginning teachers may see each class and each student as unique and therefore see limited potential in reflection on practice.	Look for patterns in your interactions with students, analysing these patterns and try to work out why you usually behave in this way.
Beginning teachers may feel powerless to change the situations in which they are placed.	Don't try to change the whole education system in one year. Be realistic about what you can change, but don't ignore the things that you should be trying to change.
Beginning teachers may feel that they have no control over the social, moral and political issues that impinge on their classrooms.	All these issues are things that you need to reflect on. You may not be able to change them immediately but you can at least discuss them with other teachers.
The routine of teaching may make it difficult to develop a challenging and questioning perspective.	Challenge yourself to question every major teaching decision you make.
Many teacher education students want "recipes" to help them develop patterns of appropriate teacher behaviour (ways of dealing with everyday classroom events) so that they can react in fixed ways.	Don't expect to be able to deal with similar events in the same way. Be flexible. Reflect on the reasons for the behaviours of your students rather than jumping to conclusions.

Preservice teacher education students are often confused by the range of theoretical models of teaching and learning with which they are confronted.	Begin your reflections by adopting just one theoretical stance. Use that perspective to interpret what is happening, then adopt a different theoretical stance.
Reflection is not a normal mode of behaviour for many people.	Develop the habit of reflecting on everything that happens in your life.
It is easy to confuse knowledge acquisition with reflection.	The essence of reflection is not to discover something entirely new, but to come to a better understanding of something that is already familiar.

Real teaching situations are extremely complex and, as Korthagen and Kessels (1999) point out, teachers simply do not have time to reflect on all the numerous and complex relationships between the various factors embedded in every teaching situation—they have to *act*. As a result, many teachers tend to respond to challenging situations in ways that reflect how they behaved in similar situations in the past. This may be appropriate and productive in some circumstances, but there is a danger that you will fall into inappropriate routines if you do not systematically reflect on your teaching.

So, where does this leave you? Well, it basically means that you will need to learn how to reflect and that this will probably be a difficult and lengthy process. However, the sooner you start to be reflective the sooner you can become proficient at it. Get started as soon as possible—start reflecting today on what you believe about teaching and learning. Start keeping a journal of your experiences and your reflections on those experiences. If possible, find someone with whom to share your reflections because you are much more likely to gain insights into teaching and into your own learning processes if you are able to reflect collaboratively (Dobbins, 1996; Killen, 1995; Northfield, 1993; Zeichner, 1992b).

Conclusion

"Good teachers are made, not born; and, the making of a teacher is a complex process. Reflection is a crucial part of that process and it cannot be expected to develop without training, modelling and structured experience" (Selinger, 1991:1). Although expressed in many different ways, this view is common in the literature; it embodies the notion that reflection is a mode of thinking that can be identified, described and developed. It also suggests that, given the right set of conditions, a teacher who is not reflective can be transformed into one who is reflective. This transformation requires knowledge and practice. It also requires keen perception because perception is the filter through which individuals interpret their experiences. Unavoidably, our perceptions are influenced by our world view (our individual way of looking at the world)—these beliefs and values determine what information we use when reflecting on our experiences. As Hart, Shultz, Najee-Ullah and Nash (1992:41) put it, "What we see depends on what we are looking at when we reflect".

Unless teachers understand what they are doing and why they are doing it, there is little chance that their efforts will result in student learning or that their actions will be morally and ethically appropriate. Reflective teaching should involve "searching for patterns about one's thinking about classroom practices and interrogating the reasons of labeling some lessons as successes or failures" (Raines & Shadiow, 1995:30). By developing the disposition and the ability to be reflective, teachers can ensure that what they do is both ***effective*** and ***defensible***. While it will always be true that deliberation and intention alone will not make teachers' actions correct or defensible, reflection that is focused on understanding and improving teaching (from both technical and moral perspectives) should be a routine part of each teacher's everyday activities.

REFLECTIVE QUESTIONS

Consider the following questions that a teacher might reflect on after a lesson. What types of reflection are indicated by these questions? What other questions do you think teachers should use to guide their reflection?

Did the students achieve the outcomes I intended? If not, why not?

Why did I want students to achieve these outcomes?

Was the strategy I used effective for all students? What other strategies might have been more effective?

Which students were able to relate the lesson to their prior knowledge, experiences and interests?

How flexible was I in modifying the lesson to accommodate unforeseen responses from the students?

What learning theories might explain what happened in this lesson?

As a result of this lesson, what have I learned about teaching?

Full details of all references cited in this chapter are available in the reference list of the book from which the chapter was taken.

Roy Killen is an Associate Professor in the Faculty of Education and Arts at the University of Newcastle. He may be contacted by email at roykillen@mac.com